

(figs. 7 *a*, *c*, *d* of same tabula) are the forms which most resemble the recent shell in question, and are those which chiefly occur in the Red Crag other than that of Walton, though specimens of *alveolatus* sometimes occur with them, which may have been lingering individuals of the disappearing Walton form, or merely derivatives from destroyed sand banks of Walton age, mixed up with the increasing and prevailing forms, in consequence of that destruction and reaccumulation of these banks which was proceeding throughout the formation of the oblique-bedded part of the Red Crag.

I should not have troubled you with the subject had I not thought it likely that some one might point out the identity in question as an oversight of my father's; and having assisted him in all his supplements, and knowing his views about *Murex erinaceus* in the Crag, I wished to anticipate such criticism by explanation. If there were any conflict between his view and mine, I should entirely defer to his; but there is not, as he was not acquainted with the variety in question.

In tab. iv. fig. 9, of the 'Crag Mollusca,' is represented a full-grown shell with *long open canal* under the name of *Murex tortuosus*. This shell Dr. Jeffreys, in the list to Prof. Prestwich's paper, by express reference to the page of my father's work describing it, assigns as "*Murex erinaceus*, var.," notwithstanding his statement in the 4th vol. of the 'British Conchology' (published four years previously) that the genus *Murex* has the canal closed ("covered over"), and his present assertion, that the closure of the canal distinguishes it from *Purpura*, and that the question of it "involves a difference not merely of a specific but of a generic and even family character." J. Sowerby's original figure of *M. tortuosus* (Min. Conch. tab. 434) shows the canal wholly open, as does my father's (and, I may add, as does every specimen of it that I have seen or can hear of); and my father's description of it (Crag Moll. vol. i. p. 40) is, "canal contracted but open."

I am, &c.,

SEARLES V. WOOD.

Aug. 17, 1883.

#### *A Social Heliozoan.*

Prof. Leidy exhibited drawings and made some remarks on a singular Heliozoan recently observed by him. His attention had been directed to it by Mr. Edward Potts, who discovered it, contained in considerable numbers in water, with vegetable débris, from Lake Hopatcong, N. J., where it had been obtained last autumn. The animal occurred mostly in groups composed of numerous individuals. One of these groups, of irregular cylindroid shape, 0.84 millim. long by 0.36 millim. broad, was estimated to contain upwards of a hundred individuals. They reminded one of a mass of tangled burs. They remained nearly stationary even for twenty-four hours, and exhibited so little activity, that without careful scrutiny they might readily be taken for some inanimate structure. The individuals composing the groups appear to be connected together only by mutual attachment of their innumerable rays; and none were ob-

served to be associated by cords of protoplasm extending between the bodies of the animals, as seen in *Rhaphidiophrys elegans*. The individuals associated together were of two kinds, those which were active, and a smaller proportion which were in an encysted quiescent condition.

The active individuals resembled the common sun-animalcule. The body was usually spherical or oval, but variable from contraction, colourless, granular, and vesicular, with a large central nucleus more or less obscurely visible and variably granular, with three or four or more peripheral contractile vesicles. The body had a thick envelope of delicate protoplasm, with innumerable and immeasurably fine straight spicules. The envelope with the spicules extended in numerous conical rays, from which proceeded numerous immeasurably fine granular rays. The encysted individuals presented the same essential constitution, except that the body was regularly spherical, enclosed by a structureless envelope or membrane, contained no contractile vesicles, and the enveloping protoplasm was devoid of granular rays. The body of the active individuals measured from 0.024 to 0.036 millim. in diameter; in the encysted individuals usually about 0.02 millim. An active individual, with the body 0.033 millim. in diameter, with its envelope was 0.055 millim. in diameter. An encysted individual, with the body 0.02, with its envelope was 0.036 millim.

The active individuals were observed to feed on two species of minute monads, which were swallowed in the same manner as in *Actinophrys*. After some hours a few individuals appear to have separated from the surface of one of the groups; but they were as stationary and sluggish as when in association with others.

The species is apparently distinct from others which have been previously noticed, and may be named *Rhaphidiophrys socialis*.—*Proc. Acad. Nat. Sci. Phil.*, April 1883, p. 95.

#### *On the Genus Hyliota.* By GRACEANNA LEWIS.

By a letter of inquiry from Prof. G. Hartlaub, M.D., of Bremen, Germany, concerning some rare African birds of the genus *Hyliota*, attention has been drawn to the specimens now in this Academy, of which there are three, all of them being male birds.

The question at issue is whether there are two distinct species or only one; and as distinguished authorities differ on this point, it seems proper to offer to ornithologists the testimony which these specimens afford.

The genus was first characterized by Swainson, who described the species *H. flavigastera*. The bird was at first supposed to belong to India, but was subsequently found to inhabit N.E. Africa and Senegambia, and was for a long time the only known species of the genus. Our specimen agrees moderately well with Swainson's description, but is, no doubt, an immature male; the wings are brownish and are not edged with glossy purple, but instead with a dull greyish white. The two external pairs of tail-feathers are edged more or less with white, as in the female. The band of white on